

**FEDERALLY
THREATENED**

Canada Lynx

(*Lynx canadensis*)

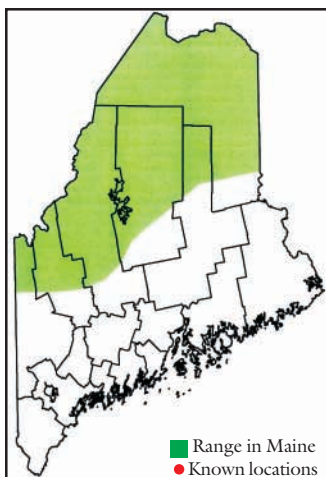


Description

The loup cervier, lucivee, and Indian devil are all names used by old-time Maine woodsmen for the elusive Canada lynx. This is a secretive, forest-dwelling cat of northern latitudes and high mountains. It is medium-sized, similar in size to the bobcat, but appears larger because of its long legs. It has unique, long (over one inch), black tufts of fur on the ears and a short, black-tipped tail. (Bobcats have small tufts on the ears, and 3-4 black bars on the tail. The tip of the tail is black on top and white underneath.) The winter coat is light gray and faintly spotted, and the summer coat is much shorter and has a reddish-brown cast. Lynx have unusually large, densely haired feet to help travel over snow. Adult males average about 33½ inches long and weigh 26 pounds. Females are about 32 inches long and average 19 pounds.

Range and Habitat

Lynx are common throughout the boreal forest of Alaska and Canada. The southern portion of their range once extended into the U.S. in the Rocky Mountains, Great Lakes states, and the Northeast. Today, they are known to exist in the lower 48 states only in Montana, Washington, Maine, and possibly Minnesota. Confirmed tracks and sightings in Maine in the last 15



years have been concentrated in northern Aroostook, Piscataquis, Somerset, and Franklin Counties. Historic data suggest they also occasionally occur in eastern Maine. A recent habitat assessment completed by the University of Maine documented the likelihood of suitable lynx habitat in several areas in northern Maine. Good habitat consists of large areas of young, dense stands of balsam fir and northern hardwoods approximately 10-20 years after a major forest disturbance (cutting, fire, etc.). These stands provide the highest densities of snowshoe hares, the primary food for lynx, and suitable areas for denning.

Life History and Ecology

Mating occurs during March, and 1-7 young are born 60-65 days later in May. Maine litters produce 1-4 kittens. Lynx dens in Maine consist of a bed under thick regenerating fir or elevated downed logs. The female raises the kittens. Young leave the den area in late June or early July and stay with the female for a full year before leaving their mother in late winter.

Lynx are highly specialized to hunt snowshoe hare, which comprise over 75 percent of their diet. When hares are abundant, lynx may consume one or two a day. In the summer, the diet is more varied and may include grouse, small mammals, and squirrels. In winter, carrion (dead animals) may supplement the diet.

Lynx are primarily nocturnal, but Maine lynx have been very active during the day. Family groups (mother and kittens) hunt together to increase efficiency. Males are solitary for most of the year except the breeding season. Size of the home range varies with snowshoe hare density, habitat, and

season. In Maine, home ranges are about 18 square miles, or the equivalent of half a township. Home ranges overlap, especially where neighboring lynx are of different ages and sexes.

In northern Canada and Alaska, snowshoe hare populations undergo a 10-year cycle. Lynx numbers vary with the snowshoe hare populations. Snowshoe hare fluctuations in Maine are poorly understood, and may be more influenced by habitat availability and forest practices than by a multi-year cycle. During periods of low prey availability, lynx will travel hundreds of miles. Forty percent of the lynx population can starve and litter size declines following a crash in snowshoe hare populations.

Threats

Lynx are rare at the southern edge of their range as in Maine. Populations likely fluctuate with populations of snowshoe hares and are affected by lynx populations in neighboring Canada. Decreased snowfall in recent decades gives a competitive advantage to bobcats, whose range periodically expands northward. Bobcats are more aggressive and displace lynx from their home ranges. In recent years, a few lynx have been incidentally trapped or snared. Fishers killed several radio-collared lynx in Maine. Clearcutting is beneficial to lynx by providing large patches of young forest stands preferred by snowshoe hare. Recent trends in forest practices from large clearcuts to selective cutting may limit future lynx habitat. Woods roads are not a barrier to movement, but do increase human access and associated disturbances and introduce a small chance of road mortality. High-speed, interstate highways may be a more significant source of mortality and barrier to movements.

Conservation and Management

Lynx have always been present in Maine, but populations fluctuated. Several hundred animals may occupy the state during periods of high snowshoe hare populations and optimal habitat conditions. Trapping and hunting seasons for lynx have been closed in Maine since 1967. In 1997, the lynx was considered for state listing, but there was insufficient information to assess its status. Its current status is a Species of Special Concern. In response to petitions, the U.S. Fish and Wildlife Service named the lynx as threatened in 2000. A recovery plan has yet to be developed.

Habitat conditions were close to ideal in Maine in the late 1990s as the widespread clearcuts of the 1980s attained prime conditions for snowshoe hares. As stands mature and snowshoe hare numbers

decline, lynx populations will likely decline. Lynx habitat used today will not be prime habitat 10 or 15 years later. Careful planning may be needed to ensure that sufficient young stands are always present on the landscape to preserve populations of lynx and snowshoe hares.

The role of lynx immigration from neighboring populations in New Brunswick and Quebec in supporting Maine's lynx population is unknown. Biologists have yet to determine whether a self-sustaining population of lynx can be supported in Maine through periods of low snowshoe hare density.

Much of our knowledge of lynx in Maine came from a study conducted near Clayton Lake from 1999-2003. Thirty-two lynx were radio-tagged, and 17 dens and 37 kittens were discovered. This study documented movements, sources of mortality, and home ranges, and assessed survey techniques. In 2002, a 3-year winter snow track survey was initiated to assess the relative abundance and distribution of lynx throughout their range in Maine.

Recommendations:

- ✓ Report all lynx sightings to MDIFW as soon as possible. Sightings can be verified from good photographs, tracks, scat, or hair samples.
- ✓ Manage northern forests in landscapes (at the township level) with areas having a high proportion of regenerating balsam fir/northern hardwood stands (less than 30 years old) that support high densities of snowshoe hares.
- ✓ Ensure that large blocks of suitable regenerating habitat are distributed widely over the landscape of northern and western Maine.
- ✓ Avoid incidental take of lynx from trapping and snaring.
- ✓ Conserve large blocks of unfragmented forestland. Avoid the construction of new high-volume/high-speed highways in currently undeveloped areas of northern and western Maine. 🐾